



# DET NORSKE VERITAS

## EC TYPE-EXAMINATION CERTIFICATE

*Application of:* Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2002/75/EC, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

**CERTIFICATE NO. MED-B-4312**

This Certificate consists of 3 pages

*This is to certify that the product*  
**Immersion suits - insulated**

*with the type designation(s)*

**SeaAir 1**

*Manufactured by*

**Helly Hansen Pro AS**  
MOSS, Norway

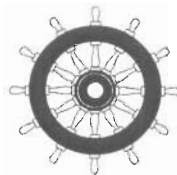
*is found to comply with the requirements in the following Regulations/Standards:*  
Annex A.1, item No. A.1/1.5 and Annex B, Module B in the Directive.  
SOLAS 74 as amended, Regulation III/4, III/7.3, III/22.4, III/32.3, III/34 & X/3,  
LSA Code as amended by IMO Res.MSC.207(81) and 2000 HSC Code 8.1, 8.3.

*Further details of the product and conditions for certification are given overleaf.*

*Place and date*

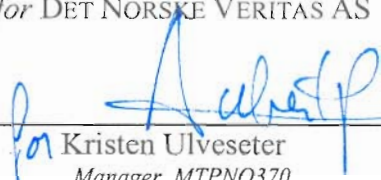
Høvik, 2007-07-16

for DET NORSKE VERITAS AS



*This Certificate is valid until*

2012-07-16

*for*   
Kristen Ulveseter  
Manager, MTPNO370  
Department Systems & Components

Notified Body No. 0575



  
Liv Tesli Haugen  
Surveyor

*DNV local office:*  
DNV Sandefjord



*Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended.*

*The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.*

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: MED-B-4312  
Case No.: 344.1-000459  
File No.: A.1/1.5

## Product description

### “SeaAir1”

Insulated immersion suit, constructed to be worn without a lifejacket. The immersion suit is equipped with an inflatable collar for comfort purposes and may be equipped with a removable self-righting unit, helicopter underwater breathing system and HPL-1 emergency locator beacon.

The suit is designed in a range of 16 sizes.

Main fabric:	Uretek 4530 M	by Uretek Inc.
Zipper:	TIZIP Super Seal	by TITEX Vertriebs-GmbH
Buoyancy foam:	Airex S32	by Alcan Airex AG

## Applications/Limitations

- Selection of sizes to be in accordance with the manufacturers' size table.
- Production tests shall be conducted in accordance with IMO Res. MSC.81(70), part 2.
- Position indicating light and retro-reflective materials shall be approved in accordance with the Marine Equipment Directive and be “wheelmarked”.

## Type Examination documentation

The following documentation is basis for the approval:

- Helly Hansen Pro AS Technical Documentation File SeaAir 1, version 1-1; 29.06.2007 approved by DNV 16-07-2007.
- Reports from prototype testing in Trondheim on 2007-01-23~25, 2007-03-27~29, 2007-05-04, 2007-06-01, 2007-06-05 witnessed by DNV.
- Test report from Sintef, project no 804021.68 dated 2007-06-28.

## Tests carried out

Tested in accordance with Revised Recommendation on Testing of Life-Saving Appliances, IMO Resolution MSC.81(70), part 1 as amended by IMO Res. MSC.200(80), as specified by Type Examination documentation above.






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### Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture. The marking shall comply with the LSA Code (IMO Res. MSC 48(66)), item 1.2.2.9.

### Mark of conformity

The manufacturer is allowed to affix the Mark of Conformity  according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

- Module D: The quality system for production and testing shall be approved by the Notified Body.
- Module E: The quality system for inspection and testing shall be approved by the Notified Body.
- Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

END OF CERTIFICATE

